

Application No. 10/016,034
Amendment of 1/15/04
Reply to Office Action Dated October 16, 2003

REMARKS/ARGUMENTS

By this Amendment claim 3 is amended. Claims 1-19 are pending.

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

Claims 1-19 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking enablement in the specification. The Office Action asserts that the specification is enabling only for activated carbon with “low oxygen-containing sites” but not for activated carbon or other high surface area materials with “high oxygen-containing sites”. This rejection is respectfully traversed.

The proper standard for evaluating compliance with the first paragraph of 35 U.S.C. § 112 is “whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.” See MPEP § 2164.01, quoting *United States v. Telecommunications, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988). The initial burden is on the Examiner to make a *prima facie* showing of non-enablement. See MPEP § 2164.04.

The Examiner attempts to sustain this burden by citing Applicant’s disclosed preference for high surface area materials, such as activated carbon, having a minimum number of oxygen-containing active sites. However, the fact that an embodiment is less preferred than other embodiments does not render it non-enabled. See, e.g., MPEP 2164.08(c), which provides in pertinent part:

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Features which are merely preferred are not to be considered critical. *In re Goffe*, 542 F.2d 564, 567, 191 USPQ 429, 431 (CCPA 1976).

Limiting an applicant to the preferred materials in the absence of limiting prior art would not serve the constitutional purpose of promoting the progress in the useful arts. Therefore, an enablement rejection based on the grounds that a disclosed critical limitation is missing from a claim should be made only when the language of the specification makes it clear that the limitation is critical for the invention to function as intended. Broad language in the disclosure, including the abstract, omitting an allegedly critical feature, tends to rebut the argument of criticality.

To the contrary, it is clear from Applicant's disclosure that the invention is not limited to activated carbon nor to high surface area materials having "low oxygen-containing sites". For example, the specification at page 3, line 21 to page 4, line 2, reads as follows:

The most preferred type of high surface area material is activated carbon, particularly activated carbon having a minimum number of oxygen-containing active sites. Depending on how the carbon is activated, activated carbon possesses varying amounts of oxygen at active sites, usually in the form of carboxyl, carbonyl, or hydroxyl groups. These functional groups will also react with SF₄ to produce SO₂ or SOF₂. Thus, the preferred activated carbons (and high surface area materials in general) are those with the least amount of oxygen-containing active sites.

Thus, less preferred embodiments are within the scope of the invention, despite the fact that they produce relatively large amounts of the impurities SO₂ and/or SOF₂. As certain systems exist that can tolerate relatively large amounts of these impurities in their SF₄ supply, the less preferred embodiments of the invention, as well as the more preferred embodiments of the

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invention, provide an enabled process for producing SF₄ having reduced amounts of thiethionylfluoride.

Moreover, the mere fact that the claims encompass high surface area materials not expressly disclosed in the specification does not render the claims non-enabled. "It is well settled that patent applicants are not required to disclose every species encompassed by their claims, even in an unpredictable art." *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438, 1445 (Fed. Cir. 1991). The instant disclosure includes examples of suitable high surface area materials (see, e.g., Table 1 of the specification at page 6) and provides explicit guidance regarding how one of ordinary skill in the art can identify additional suitable materials without undue experimentation. For example, the specification at page 3, line 21 to page 4, line 14, suggests the use of activated carbons and other high surface area materials that "promote the disproportionation of S=SF₂ to S₈ and SF₄" and are "compatible with SF₄" (e.g., do not react with SF₄). As noted in the specification at page 4, lines 5-7, such materials can be identified by column experiments (as further described in the Examples) measuring the relative amount of SO₂ and SOF₂ produced upon exposure to SF₄ and the relative capacities for S=SF₂. "Enablement is not precluded even if some experimentation is necessary, although the amount of experimentation needed must not be unduly extensive." *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1385, 231 USPQ 81, 94 (Fed. Cir. 1986).

Accordingly, reconsideration and withdrawal of the rejection of claims 1-19 as lacking enablement are respectfully requested.

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Claim 3 stands rejected as allegedly being indefinite under 35 U.S.C. § 112, second paragraph, for reciting the trademark/tradename “Westvaco”. This rejection is obviated by the foregoing amendment to claim 3, wherein the expression “Westvaco” is deleted. The limitation “having a surface area of 2260 m²/g” is added to claim 3 as an alternative means for identifying the Westvaco activated carbon originally specified in the claim. See the specification at Table 1.

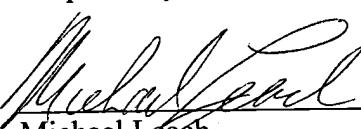
Accordingly, reconsideration and withdrawal of the rejection of claim 3 as being indefinite are respectfully requested.

For at least the reasons set forth above, it is respectfully submitted that the above-identified application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are respectfully requested.

Should the Examiner believe that anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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Michael Leach
Registration No. 27,349

Air Products and Chemicals, Inc.
7201 Hamilton Blvd.
Allentown, Pennsylvania 18195-1501
(610) 481-7265